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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,518	07/11/2003	Mark F. Bares	M297.12-0307	2968
27367	7590	11/16/2006	EXAMINER	
WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319			PARRIES, DRU M	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,518

Applicant(s)

BARES ET AL.

Examiner

Dru M. Parries

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-20 is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 13-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed September 7, 2006 have been fully considered but they are not persuasive. Regarding the Applicant's argument that the prior art references combined don't teach a two element sensor with one sensor attached to the latch and the other attached to the striker, Admission teaches a door with a latch and striker, Paskonis teaches a sensor located on the latch, and Read teaches a two element sensor (sensor and sensor actuator) wherein when the door is closed the two sensor elements are juxtaposed to each other. Since Paskonis first taught that the location of his sensor is on the latch, then Read's teaching was brought in that the two sensors are juxtaposed to one another when the door is closed, it would make it obvious to place the other sensor, of the two sensor element, on the striker, therefore they would be juxtaposed to one another when the door is closed.

Regarding the amendments to claim 15, Fariz teaches an interlock controller (12) with sensor inputs (from 14 and 16). However, none of the references teach enabling a power component when the door is removed from the vehicle, therefore claim 15 is allowable.

Claim Objections

2. Claim 15 is objected to because of the following informalities: the Examiner believes the term "first component of sensor", in the last line of the claim should be "first sensor element", as stated earlier in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 6-8, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art (Admission), Paskonis (2003/0107222), Fariz et al. (2002/0112688), and Read (5,602,526). Admission teaches a loader having a frame, an operator door, a door latch and a striker, and the latch engaging the striker when the door is closed (Claim 8, lines 1-8).

Admission fails to teach a sensor and interlock arrangement implemented into the vehicle.

Paskonis teaches a door with a sensor mounted on the door adjacent to a latch, and a striker on the vehicle body. He teaches the sensor detecting whether the door is closed or not and provides an indication (i.e. a signal) as to the position of the door ([0040]). Fariz teaches a door sensor, which detects the position of a door (open or closed) and based on what is detected enables or disables a vehicle function (Claim 6). Paskonis and Fariz don't explicitly teach exactly how his sensor system detects closure of the door nor what type of sensor it is. Read teaches a sensor system for detecting the closure of a door via two element sensor. He teaches one element being a sensor (magnetically actuated switch) attached to a vehicle body. He teaches a second element being a magnet (switch actuator) attached to the door of the vehicle. He goes on to teach the switch mounted to be juxtaposed to the magnet when the door is closed (abstract), which means, when combined with Paskonis, that one sensor element will be mounted on the latch, and the

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other would be mounted on the latch striker. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Paskonis', Fariz's and Read's sensor/interlock system into Prior Art, so that there are some safety features incorporated into the system of the construction equipment to make operating the loader safer. None of the references teach explicitly the magnet being on the body of the vehicle and the sensor being on the door. It would have been obvious to one of ordinary skill in the art at the time of the invention to reverse the elements (magnet and sensor) in Read's teaching, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 9 USPO 167.

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art (Admission), Paskonis (2003/0107222), Fariz et al. (2002/0112688), and Read (5,602,526) as applied to claims 1-3 above, and further in view of Cahn et al. (2004/0203381). Admission, Paskonis, Fariz and Read teach an interlock arrangement on a loader as described above. These four references fail to teach what type of magnetically actuated switch is being used. Cahn teaches a magnetically actuated switch being a reed switch, and teaches that a reed switch could be replaced with a Hall Effect sensor ([0028]). It would have been obvious to one of ordinary skill in the art at the time of the invention to implement either a magnetic reed switch or a Hall Effect sensor as the magnetically actuated switch because it wasn't specifically taught what type of switch that is, and possible replacements were taught and are well known in the art to work.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art (Admission), Paskonis (2003/0107222), Fariz et al. (2002/0112688), and Read (5,602,526) as applied to claim 8 above, and further in view of Wherley (2004/0000799). Admission, Paskonis,

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Fariz and Read teach an interlock arrangement on a loader as described above. These four references fail to teach the functions being disabled to be hydraulic functions. Wherley teaches an interlock system, which detects the state of a door and upon detecting the door being in an open state disables hydraulic functions (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to disable the hydraulic lifting arms because it diminishes the potential for damage to an open door or a human being.

Allowable Subject Matter

7. Claims 15-20 are allowed.
8. Claims 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

All of these claims contain the allowable subject matter: enabling a component of the vehicle when the door is removed completely from the system.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dru M. Parries whose telephone number is (571) 272-8542. The examiner can normally be reached on M-Th from 9:00am to 6:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMP

11-2-2006



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